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Conservation for Whom? Elephant Conservation and Elephant Conservationists in Thailand

Suphawat LAOHACHAIBOON*

Abstract

This paper traces the historical development of elephant conservation in Thailand through the exploration of two interrelated state organizations: the Thai Elephant Conservation Center (TECC) and the National Elephant Institute (NEI). By examining their ideological construction, policies and interactions with society, as well as their conflicts with other elephant-related communities, this paper argues that despite all the state's attempts to take the lead in tackling elephantine problems, these organizations continuously faced the dilemma of elephant conservation during their development. Firstly, TECC struggled to sustain organizational survival while simultaneously concretizing their activities for internationally acclaimed elephant conservation in the 1990s. Secondly, NEI experienced difficulty in balancing its expected roles after 2002 in protecting elephants in collaboration with local communities, as well as functioning internationally as a lynchpin of the nation for elephant conservation.

Keywords: elephant conservation, domesticated elephants, Thai Elephant Conservation Center, National Elephant Institute, logging ban, Thailand, Phachan ritual

Introduction

This paper examines the consequences of Thailand's imposed logging ban of 1989 as a part of social change which has considerably threatened the livelihood of domesticated elephants in the country. Tracing the historical development of elephant conservation ranging from the Thai Elephant Conservation Center (TECC) to the National Elephant Institute (NEI) and the endeavors of these state-based elephant conservationists to preserve elephants, reveals the dilemma between their domestically and internationally anticipated roles in conserving the animal and their organizational limits in reality. In Thailand, there generally exist at least three major elephant-rearing communities, including those of the state or official agencies, local people and private groups. All groups can be further categorized into sub-groups depending on several criteria such as ethnicity, patterns of elephant usage, and elephant ownership. Each group unquestionably represents different perspectives about the ways in which domesticated elephants have been

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raised in their proper communities. This study, in particular, aspires to echo the perspectives of the official agencies, TECC and NEI, since their roles and functions are pivotal in understanding the rudimentary, yet crucial essence of Thai elephant conservation efforts. Specifically, this study emphasizes the changing social contexts in which TECC's ideology and practices pertaining to elephant conservation were molded, enacted and re-enacted through NEI along with streams of alterations, which in turn had unprecedented repercussions on elephants in the country.¹⁾

This research was primarily based on information obtained from both literature reviews and interviews during several field surveys to TECC, NEI and certain elephant camps in the north of Thailand in 2005 and 2007. In particular, I visited TECC and NEI four times and conducted field research for approximately a month in total during that period. From being an utter stranger, I gradually created a rapport with TECC's officials and *mahouts* (elephant riders) to the point that I was allowed to intimately observe not merely their daily livelihood with elephants, but also the controversial training of two young elephants who had just been through the *Phachan* ritual. *Phachan*, literally means "to separate," and is a "traditional" ritual practiced by the *mahouts* in northern Thailand for domesticating young elephants after being weaned to the age of three or four. It is believed that elephants which were domesticated through this means would be sufficiently tamed to follow teachings and orders made by their *mahouts* throughout the rest of their life. Therefore, *mahouts*' perspectives toward elephant conservation became clear through conversation based on mutual trust.

This article begins with a discussion of the importance of the elephants in Thailand as well as a contextualization of the population decline of domesticated elephants to the point that the animal was classified an "endangered species" before a logging ban was imposed by the Thai government in 1989. Then, it traces the contextual origin of TECC's establishment which was necessary for organizational survival, and later on adaptation, under the state-backed banner of elephant conservation. Next, it continues with a discussion of the advent of NEI in 2002 which refurbished TECC's ideology and practices of elephant conservation by symbolizing the elephant as an animal of the nation. In the final section, this study addresses the controversial *Phachan* ritual by focusing on the ramifications of revamped elephant conservation, drawing on some of the voices of other elephant-raising communities and NEI's existing projects to locate the stance of state agency in Thai elephant conservation.

1) It should also be noted that the different perspectives toward elephant conservation held by local people and private groups in Thailand were also examined concomitantly but these perspectives will be extensively dealt with in other forthcoming papers.

Background

The Asian elephant (*Elephas maximus*) inhabits numerous countries in Asia and its existence has substantially contributed to people's livelihoods. Transcending political boundaries, the Asian elephant is predominantly found on the Indian sub-continent (India, Nepal, Bhutan and Bangladesh), continental Southeast Asia (China, Myanmar, Thailand, Laos, Cambodia, Vietnam and Malaysia), and on islands in Asia (Sri Lanka, Sumatra and Borneo) [Sukumar 1992: 10]. In Thailand, the population of domesticated elephants and wild ones ranges from approximately 3,000 to 3,500, respectively [Mattana 2003: 305]. Wild elephants are distributed unevenly in small populations over forested hill tracks in which a number of protected area complexes in four regions are located — in the north and west, the Phetchabun Range, the Dangrek Range and the peninsular part [Sukumar 1992: 20]. While wild elephants are patchily dispersed in national parks and wildlife sanctuaries in those protected area complexes, domesticated ones are seemingly scattered due to the proportion of elephant ownership in the country. According to a study about the shifting pattern of elephant ownership, it was found that 95% of domesticated elephants in Thailand belonged to private or business groups whereas the other 5% are in the possession of the state [Mattana 2003: 72].

Elephant as the Salient Animal in Thai History

As in other various countries, the elephant in Thailand has long been a salient animal whose role is pragmatically diverse and integral to the fabric of Thai history, society and culture. As an icon, the elephant in Thai cultural imagination has crucially represented not only great virtue in Buddhism but also functioned as a symbol that conferred legitimacy, prestige and power upon political aspirants [Komatra 1998: 201]. Once embellished on the country's flag, *Changpheuak*, the auspicious white (albino) elephant in Thai language, is not purely a chimera shrouded in mystery but still actually exists and is fundamentally associated with ancient religious rituals and the monarchy [Ringis 1996: 94]. Contrary to Western misunderstandings of the white elephant which has been alluded to as “a burdensome or costly possession,” the Siamese monarch sought after them since possessing this auspicious animal significantly embodied the king's virtue (*Barami*) [*ibid.*: 96].

In practice, the elephant also played a considerable role as a royal vehicle in traditional warfare, a propitious animal in royal ceremonies and especially as a beast of burden in teak logging operations in the country. From the 1840s to the 1970s, there was a massive increase in the capture of wild elephants for use. They subsequently became the backbone of the timber industry at least from the end of the nineteenth century [Lair

1988, cited in Matthana 2003: 26]. Wild elephants were originally caught by the Kui (indigenous people migrating from Attapeu-Saenpang) in Lao PDR and now mainly inhabit Thailand's northeast bordered provinces. They were bought by Thai-Yuan (people living in the Lanna Kingdom, the former northern part of present day Thailand), Shans and Burmese and then resold to European timber companies for transporting teak logs from the northern forests [Seidenfaden 1952: 171]. In general, the elephants were employed to drag teak logs from forests to streams or rivers during the rainy season. Because geographical limits placed physical constraints on working conditions, only the elephant was capable of extracting and transporting teak logs from precipitous areas where the exploitable teak stands were scattered [Newnham 1956: 19]. The methods used to transport logs included hauling, rolling, pushing and lifting, and varied according to the weight of teak logs and the geography of the environment [Amnuay 1986: 121–123]. Moreover, awaiting the arrival of the next rise of water in the rainy season, the elephant would work together with human forest laborers to place logs in the beds of streams. Both of them jointly continued their work to break up the deposited stacks of teak logs and eventually sent them to their destinations during the period when the water level in rivers facilitated floating them [Bourke-Borrowes 1927: 32]

The Advent of the Thai Elephant Conservation Center (TECC): On the Road to Elephant Conservation

After Thailand's deforestation, which was continually precipitated by forest destruction and illegal logging from the 1960s and led to the national calamity of flash floods in the southern provinces in late November 1998, the Thai government imposed a nationwide logging ban through an emergency decree in January 1989. The logging ban in 1989 was a watershed that had a drastic impact and far-reaching effects on elephant populations in Thailand. The first and most immediate effect, was that at least up to 2,000 elephants which had worked in logging concessions, suddenly became unemployed. The second effect was the elevated status of the elephants in the country from beasts of burden to so-called "endangered species." The following section of the paper elaborates on the social contexts which gave rise to the changing status of the elephant as an endangered species, and discusses the Forest Industry Organization's (FIO) drive to establish TECC in 1991 and inaugurate elephant conservation in Thailand for the first time.

Post-logging Ban: Elephants becoming "Endangered" and the FIO

With the national logging ban in 1989, the elevation of elephants to the status of "endangered species" worthy of protection became an issue on domestic and internation-

al fronts.

In Thailand, the future of elephants and their handlers became uncertain as timber logging concessions were brought to an end. Out of 3,243, the whole population of domesticated elephants in 1989, approximately 2,000 were reportedly engaged in traditional forestry work and 61.67% of them were divested of their jobs because of the ban on logging operations [Thailand, Department of Livestock Development: 1996]. Apart from the prospect of unemployment, the domesticated elephant population was already in decline and their welfare in question, so much so that their status became biologically endangered.

Fig. 1 shows that the number of reported domesticated elephants plummeted from 9,665 to 3,705 and 2,938 in the years 1971, 1981 and 1991, respectively. In other words, the population of the elephants decreased at a ratio of 62.81% in the 1970s and 20.7% in the 1980s.

The news of elephants in peril, such as daily accidents on the streets in Bangkok and their exploitation in ongoing illegal logging operations, were also widely publicized, making the elephants and their plight much more visible than before 1989. It was reported that elephants were doped with amphetamines and forced to work continuously in the forests from four to five days, or the equivalent of between 96 to 120 hours, without any rest in order to generate revenue for their owners (about 5000 Baht each day or up to 100,000 Baht per month) [Creating the New World for Thai Elephants of Lampang Province Project n.d.: 15]. Approximately 300 elephants were found to have been exploited in the Salween National Park and the Salween Wildlife Sanctuary in Thailand

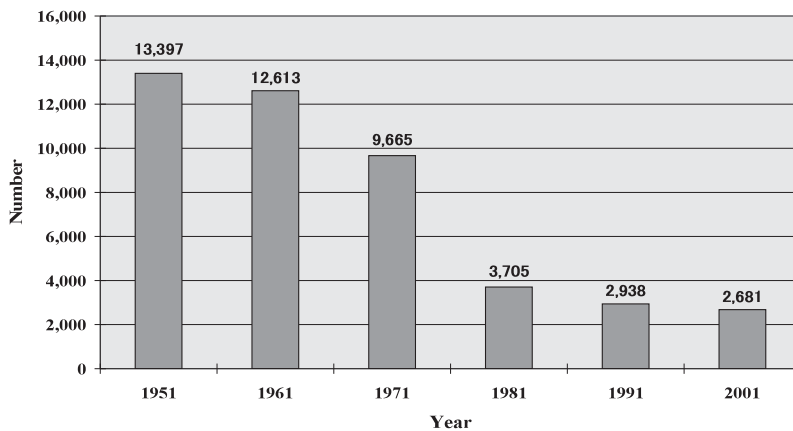


Fig. 1 Domesticated Elephant Population in Thailand from 1951 to 2001 *

*Source: Statistics were combined from *Pramuan Sathiti Pracham Pi* 2512, 2522, 2538 and 2548 [the Yearly Statistics Report of 1969, 1979, 1995 and 2005], Department of Livestock Development, Ministry of Agriculture and Cooperatives.

to haul logs across the Salween River to the Burmese side [Sakol and Taweepoke 2002: 28]. Some of the impounded elephants were found handicapped, with broken legs or backs after stepping on land-mines in war-torn territories of ethnic minorities, while others had to endure blindness or other physical and mental trauma.

Charged with the task of alleviating the plight of the elephant, the FIO also came under tremendous financial pressure because the logging ban deprived the FIO of its major source of revenues from logging concessions and timber industry business. While the FIO took in approximately 293 million Baht per annum between 1973 to 1990, its funds drastically slumped to about 36 million Baht and 25 million Baht in 1991 and 1992, respectively, incurring losses of up to 71 million Baht in 1993 [Anuphap 2007].

Besides the domestic impetus, the Thai government was influenced by the necessity to conform to changing international regimes with regards to elephant management in the late 1980s. This can be seen in Thailand's reaction to the ban on illegal wildlife trade by CITES (Convention on International Trade in Endangered Species of Wild Fauna and Flora) in 1991. In 1975, CITES regulations listed the Asian elephant (*Elephas maximus*) in Appendix I as an "endangered species." As a result, the importing and exporting of any parts of the Asian elephant became illegal in the international community. Since Thailand had abided by this international agreement after ratifying the Convention in 1983, the Thai government undertook several urgent steps to tackle the illegal trade in wildlife in response to the ban enforced by CITES. Significantly, the Wild Fauna Reserve and Protection Act 1992 was a legal product created to counteract flagrant poaching, and concomitantly ameliorate the blemished image of elephant conservation in the country. Again, this sanction ineluctably ennobled the status of the elephant as an endangered species in Thailand despite the fact that it was influenced by CITES of which the original goal was to merely limit the trade of endangered species rather than their conservation.

The Establishment of TECC and Its Nascent Period

Caught in the domestic and international crossfire, the FIO established the Thai Elephant Conservation Center (TECC) in 1991. Located in Lampang Province and adjacent to the FIO's Thung Kwian Forest Plantation, TECC was initially founded to commemorate Her Royal Highness Princess Maha Chakri Sirindhorn on the occasion of the 3rd circle of Her Royal Highness's birthday in 1991 with the aim to "save Thai elephants from extinction" [Forest Industry Organization 2002: 49]. Endeavoring to act as a lynchpin for the conservation of the Thai elephant, it defined its mission as one that comprehensively included training young elephants, preserving elephant logging techniques, disseminating educational knowledge about elephants and developing eco-tourism in parallel with the expansion of FIO's green mission to protect, restore and develop forest resources [*ibid.*].

However, the ideologies and practices pertinent to elephant conservation in this period were emphatically short of the international objective of boosting or at least sustaining the rate of elephant reproduction in the long run. Rather, TECC was born out of necessity on the part of the financially-strapped FIO to absorb the exodus of unemployed elephants and mahouts. The fact that TECC's tenet and practice of "elephant conversation" was economically oriented meant that its policies and practices were largely ineffective and partially responsive to the publicized plight and imminent extinction of elephants.

TECC's elephant conservation efforts became more responsive and were integrated into Thai government-promoted eco-tourism known as "Amazing Thailand" in 1998 and 1999. FIO's elephants were actually treated more like an economic animal, noticeably under the scheme of elephant conservation which would vindicate the Thai government from any accusation of mistreatment or abuse of this endangered species. Objectified as the symbol of Thailand, the elephant was utilized by TECC as a tourist attraction. TECC was initially determined to make its elephant tourism a prototype for other private business groups, particularly in northern Thailand after the logging ban of 1989.²⁾ Programs such as elephant riding and homestays became the dominant paradigm of TECC's elephant conservation activities. Remarkably, what can be seen here is TECC utilizing the historical setting of working elephants in the north to conserve the elephants and captivate the popular attention of tourists.

The 1990's: The Ongoing Plight of Elephants and TECC's Initiatives

Prompted by the continual plight of elephants, TECC was on alert for potential changes in its organizational role of bettering their welfare. These perceived changes of TECC's roles appeared to be necessary in the 1990s due to wide-ranging problems concerning elephants. These started with the news of elephants being dosed with amphetamine in illegal logging operations during the time of the logging ban. To maximize their profits by making animals work longer and harder, some exploitative mahouts gave amphetamine-tainted food to the elephants. This practice of animal abuse was not widespread, since mahouts generally treated their elephants with care and love. But the cases of abuse that did become public were sensational enough to arouse widespread condemnation. Public consternation about their predicaments deepened when eight wild elephants, including babies, reportedly died after falling down the Haew Narok Waterfall in the southern part of the Khao Yai National Park in August 1992. This incident triggered public dismay and concern at the impending extinction of the elephants. As a result, it provoked debate on

2) Interview with Prasop Thipprasert, Chief of *Mahouts* and Thai Elephant Training College, at the TECC on February 24, 2007.

how to preserve this endangered species along with forest conservation. Following the tragedy of the wild elephants, the death in 1994 of Honey, a two-year-old female domesticated elephant belonging to the Dokdin Show, a wandering circus, stirred up the mass media and people throughout the country. The death of Honey triggered the unprecedented formation of Non-Governmental Organizations (NGOs) and Governmental Organizations dealing with the conservation of elephants in Thailand [Mattana 2003: 16].

During the latter half of the 1990s, elephants still appeared more susceptible to mistreatment and death, if not to total extinction. The first problem was the prevalence of accidents happening to roaming elephants in Bangkok and the second one was the ongoing distress of illegal logging elephants. The first problem simmered and became controversial to the degree that a ban on roaming elephants and their keepers was imposed by the Bangkok Metropolitan Administration (BMA) in 1995. In May 1998, the National Identity Board, Office of the Prime Minister declared that Elephant Day be commemorated on March 13 annually, accentuating the significance of cherishing and saving the elephant for the nation. A year later, the story of Motala, the 38-year-old elephant who lost her left front foot to a land mine located in the war-torn forests of southern Burma, repeatedly underscored the harsh treatment of many elephants by illegal logging practices around borderline areas.

As an organization responsible for the conservation of the elephants, TECC endeavored to assert its authority in protecting them from the pressing predicament they faced in Thailand. Having carried out most of its obligations, the organization managed to create numerous projects to preserve the remaining elephants as can be observed in Table 1.

First, TECC continued sustaining the elephant's health care and welfare services through an Elephant Nursery Center, Elephant Hospital, Mobile Elephant Clinic, and a Elephant Adoption Project while nurturing some auspicious elephants at the Royal Elephant Stable. In addition, TECC enlarged its mission to encompass the control of elephants found in Bangkok and other cities, thus ineluctably involving itself in the process of rectifying the allegedly illegal practice of elephant exploitation such as roaming elephants. Second, it embarked on the project of Elephant Reproduction, including Artificial Insemination (AI), in an attempt to develop methods for facilitating their natural breeding under the supervision of the Elephant Breeding Center. Third, the organization implemented the Elephant Reintroduction Project in 1997 to solve the problem of unemployed domestic elephants, particularly those engaged in inappropriate work such as illegal logging, with the objective of restoring the genetic biodiversity of the wild elephant population in conservation areas in Thailand. Likewise, the Creating the New World for Thai Elephants of Lampang Province in Dedication to His Majesty the King Project was conceived in 1999 to change the image of Thailand as a country notorious for illegal poaching and illegal trade in endangered species of wild fauna and flora. Indeed, the aim of reintroducing elephants to forests was to bring about legal

Table 1 TECC's Elephant Conservation Operations from 1990 to 2000 *

Mission	Sub-organization	Name of Project or Activity
1. To provide elephant health care and welfare services	Elephant Nursery Center, Elephant Hospital, Royal Elephant Stable,	Elephant Adoption, Mobile Elephant Clinic and controlling elephants in musth (a state of heightened aggressiveness and sexual activity in male elephants)
2. Managing elephant reproduction	Elephant Breeding Center	Artificial Insemination Project (AI)
3. Solving problems for unemployed elephants or those involved in inappropriate works	**	Elephant Reintroduction Project (since 1997) and Creating the New World for Thai Elephants of Lampang Provinces in Dedication for His Majesty the King Project (1999)
4. Training elephants and disseminating knowledge about elephants and local tradition	Mahout and Thai Elephant Training School (since 2000)	Advising private owners on elephant health care, husbandry, training and management while promoting tourism to those interested to experience this program
5. Supplying elephant food	**	Medicinal Herb and Elephant Fodder Project (since 1998)
6. Utilizing elephants in eco-tourism	Lampang Elephant Art Academy (since 1998), Thai Elephant Orchestra (since 2000)	Elephant show, elephant riding, elephant paintings, music by elephants, homestays

*Source: Information was adjusted from *The National Elephant Institute Forest Industry organization: A new hope for elephant conservation*, Forest Industry Organization (FIO).

** Although no sub-organization was specifically responsible for these missions, it was operated and supervised under TECC.

amendment in the country so that the laws that applied to elephants in Thailand would be made congruent with those of the international community [Rangsan 2002: 155]. Fourth, TECC sustained the process of elephant domestication at the Mahout and Thai Elephant Training School while simultaneously utilizing it as a tourism promotion tool for those interested to experience and learn this traditional practice. Fifth, it initiated the Medicinal Herb and Elephant Fodder project in which various plants such as tamarinds and jackfruits were grown on 120 acres in Pa Yao National Park from 1998 [Forest

Industry Organization 2002: 65]. Sixth, as a way of promoting the elephant repertoire, the organization strived to diversify elephant talents which in turn helped generate both income and fame in promoting elephant-centered eco-tourism. In concrete, the traits of the elephant, whose intelligence intimately mirrors that of a human-being, were made apparent through various activities such as an elephant show, elephant-producing paintings and music. These activities proved so originally stunning and lucrative that a substantial income was generated for TECC's elephant conservation [*ibid.*: 66].

TECC's Stalemate Prior to Its New Leap

While TECC was striving to deal with elephantine problems, FIO's financial problems worsened, necessitating organizational reform of TECC. While Thailand experienced high economic growth from 1990 to 1996, the FIO was beset by financial difficulties, a situation that would be aggravated by the 1997 economic crisis. FIO encountered grave deficit-ridden problems and could not afford to pay salaries to employees. Between 1992 and 2000, FIO accumulated a debt of 1,250 million Baht [Forest Industry Organization 2005: 16]. To alleviate this financial crisis, FIO later revamped its policy in 2001 to tackle corruption and poverty in the organization under a campaign of transparency and good governance. Eventually, it was discharged from its pressing debt burden in January 2002 and continuously struggled to secure the organization against any likely instability in the future. In consequence, the beleaguered TECC found it expedient to devise a way to survive organizationally.

Remaking *Chang Thai*: The Era of the National Elephant Institute (NEI)

On the March 25, 2002, TECC was transformed into the National Elephant Institute (NEI) under the patronage of Her Royal Highness Princess Galayani Vadhana. The main objectives of NEI were as follows [Forest Industry Organization 2002: 53]. Firstly, NEI shall act as the principal entity responsible for developing elephant conservation in a sustainable way and cooperate with other relevant parties by integrating local traditions, wisdom and knowledge in preserving Thai elephants. Secondly, the standardization for domestic elephant care, personnel and camp operators shall be established and regulated to promote quality tourism and products. Thirdly, NEI shall collaborate with other elephant-rearing communities in creating jobs and proposing some guidelines for them to maintain their careers in tourism and other legal occupations. Functionally, TECC was still a crucial and indivisible part of NEI but NEI's roles were emphasized to validate augmenting authority at the national level. This section will clarify the shifting contexts around NEI's elephant conservation of which the very first mission was to epitomize the elephant as the national symbol of Thailand. It will scrutinize how the *Phachan* ritual

was contested by NEI and other relevant parties as a *sine qua non* in the process of Thai elephant conservation and then discuss how NEI increasingly brought about elephant conservation in Thailand.

Reconstructing the Elephant as the National Symbol of Thailand

“Elephants are an important and useful animal to our land. In the past, various kings rode the elephants to defeat enemies and protect the country. Nowadays, however, Thai people disregard the importance of elephants and (I) thus want them to live with dignity as the symbolic animal of the nation.”

Queen Sirikit's command at Doi Inthanon National Park, Chiang Mai Province, on the January 22, 2003 [Wildlife Conservation Office 2007: 4].

The inauguration of NEI did not solely emphasize the former status of the elephant as an endangered species but actually clarified its existence through a legal proposal as the symbolic animal of the nation. Consequently, this initiation provided room for contestation over the prerogative of NEI to grapple with unresolved problems relating to elephants. Indeed, those controversial spaces originally stemmed from existing stumbling blocks relevant to elephant-applicable laws and regulations which seemed incongruent among themselves, vague in content, and especially irrelevant to domesticated elephants.

According to a study on conflict solutions for domesticated elephants and wild elephants in Thailand, conducted by the research team of the Senate's Sub-committee on Natural Resources and Environment [2004], there existed altogether 18 Acts which were applicable to the protection and conservation of elephants. Surprisingly, however, the measures dealing with domesticated elephants were stipulated only in the Draught Animal Act of 1939 while other acts pertained mainly to wild elephants. Not only did the penalty for elephant abuse appear to be too lax but the concerned acts significantly lacked a common ground for integrating potential approaches to put them into effect more efficiently [*ibid.*: 57]. Even the Draught Animal Act of 1939 was not devoid of an apparent loophole which enabled the clandestine operation of elephant trade, particularly wild young ones. In particular, the clause that every young elephant at the age of eight shall be registered with an identity document gave rise to the prevalent smuggling of wild baby elephants under eight and their compulsory training until they reached the age of registration. Therefore, through this procedure, wild elephants could simply be domesticated ones, thereby facilitating their unceasing exploitation and jeopardizing the already dwindling population.

To consolidate the piecemeal laws, in January 2002, NEI drafted the Protection and Conservation of Elephants as the National Symbolic Animal Act to manage domesticated elephants throughout the country. In essence, any practice which would subject the

elephant, the symbolic animal of the nation, to cruelty, torment, overexploitation, disgrace and death was against the law and the associated *mahout* shall be penalized accordingly. For instance, bringing an elephant to roam and beg in cities shall be proscribed since it would considerably tarnish the prestige and glorified image of the elephant [Banmuang, September 11, 2006: 12]. To alleviate precarious circumstances, the enforcement of elephant registration was also proposed to be more stringent. However, as promising as this draft seemed, the legal loophole which enabled the elephant to be exported or exchanged with other countries under certain specific conditions was still intact.

Remarkably, this draft would tacitly empower NEI with more unprecedented authority in dealing with elephant problems in Thailand in unilateral and manipulative ways. As Rangsan [2002: 210] succinctly put it, this would inescapably lead to confrontation between the domineering NEI and the disavowed groups especially from Surin Province, whose proportion of elephant ownership was equivalent to one fifth in the country. If this law were to be eventually implemented, for example, elephant keepers would be deprived of the rights to collect revenue by themselves and the freedom to truncate the tusk of the privately owned elephants could only be exercised when approval was granted by state officials. Moreover, were the elephant to be found dead due to abnormal causes, the mahout would be fined at least 100,000 Baht. Most importantly, NEI would be legally empowered to expropriate all elephants of which 95% are privately owned and domesticated [Mattana 2003: 72]. To date, the Protection and Conservation of Elephants as the National Symbolic Animal Act has still remained as a draft because of disagreement and discontentment from other private elephant owners and keepers.

***Phachan*: Contestations over the Elephantine Tradition**

Although no major shift of elephant conservation was apparent at this stage, the welfare of elephants was increasingly prioritized and their importance as the symbol of the nation was more palpable than ever. With the elephant situation in the country becoming more complicated, conservation also underwent significant alteration in some aspects when the Thai government was exposed to criticism about the *Phachan* tradition in the latter half of 2002.

In September 2002, the People for the Ethical Treatment of Animals (PETA), an international non-profit organization based in Virginia, USA, widely disseminated footage of the controversial *Phachan* ritual in which a baby elephant allegedly appeared to be atrociously abused and soaked with blood and tears. This footage was filmed in a secluded village in Mae Win Sub-district, Mae Wang District, in Chiang Mai Province. In a campaign against the mistreatment of animals, PETA strongly urged the international community to condemn Thailand and impose a ban on traveling to the country by

claiming the country's elephant crushing ritual as a torture and abuse of the animal. Because of this, the tourism image of Thailand not only became severely blemished, but the dispute of maintaining this ritual as a tradition necessary to the elephant management in the country was extensively picked up by foreign organizations.

The case of the *Phachan* ritual provoked unprecedented controversy about the authenticity of the event from numerous elephant-rearing communities in Thailand. Irrespective of the bona fides of this scandal, however, the *Phachan* ritual trained the spotlight on two concrete issues that reflected and affected elephant conservation in the country. Firstly, the debate over the elephant crushing ritual significantly showed not merely the ideological divide between proponents and opponents particularly for this ritual but also the contemporary divergence on the elephant management between Thailand and western countries, or even among elephant-relevant communities in Thailand. Secondly, the impact of the *Phachan* became the catalyst for NEI, as the national organization responsible for domesticated elephants, to provide a new set of standards regarding elephant training.

With regard to ideological and practical disagreements, NEI maintained that the *Phachan* was still an indispensable process for domesticating elephants in Thailand. According to Richard Lair, the elephant guru of NEI, this elephant crushing ritual had long been practised in virtually every country in Asia that had domesticated elephants though the form of domestication and degree of cruelty are dissimilar [Hile 2002]. As a necessary apparatus for controlling the elephant, the ankus (the hook used for controlling the elephant) was always inseparable from the process of crushing but the use of the ankus, like the pistol of the police, did not have to leave any traces of bruises.³⁾ Emphatically, from NEI's view point, the discipline of the elephant crushing ritual was valid as an elephant training tradition since it has been interminably practiced and sustained by elephant keepers throughout Thailand. However, it was the approach or the way of practice that was problematic.

Likewise, this notion was even corroborated by Soraida Salwala, the Secretary General of the Friend of the Asian Elephant (FAEs), who has inexhaustibly championed for the protection of this endangered species. Arguably, the *Phachan* was not an elephant torture ritual since the beatings were not always necessary and thus not considered as a part of this tradition.⁴⁾ She compared the separation of the elephant mother from her baby to a crying child who followed his/her teacher to the school and this scene stood in stark contrast to the day when the child grew up and graduated from the educational institution. In other words, since domesticated elephants still had to live with humans in society, their schooling helped curb their wild behavior by making them docile enough to comply with commands of their handlers for the survival of their livelihood.

3) Interview with Richard Lair at his residence on March 5, 2007.

4) Interview with Soraida Salwala at the FAEs, Lampang on August 23, 2007.

Still, the elephant crushing ritual was considered by critics as an unnecessary part of elephant training and at times tremendously detrimental to their health and welfare. Of these, Sangduen Lek Chailert, the founder of the Elephant Nature Park (ENP) in Chiang Mai, propounded that there should be an alternative for maintaining the tradition of *Phachan*. That is, the baby elephants could be trained by “love and trust” since the first moment they were born.⁵⁾ Instead of punishing the trained elephants, they should be rewarded with foods and compliments when they follow the orders given by their handlers [*ibid.*]. Furthermore, the use of the ankus should be restricted to self-defense and not overuse.⁶⁾ It can be inferred from her view that the routine practice in the *Phachan* of using chains as well as sleep-deprivation, food rationing and thirst to “break” the elephant spirits and make them comply to their keepers, was not required.

As an advocate of animal welfare, Thai Animal Guardians Association (TAGA) significantly shared a common viewpoint with the ENP. Roger Lohanan, the President of TAGA, contended that in a changing Thai society, there was no need to continue the archaic practices of *Phachan* for domesticating elephants.⁷⁾ Since elephants were social animals, he continued, they could learn and adapt their behavior from their domesticated mothers from birth. Thus, the separation of mother elephants from their young became unnecessary. Though the ankus was generalized as the symbol of the *mahout* in Thailand, the international community denounced it as a sign of savagery and they opted for using other devices which do not pain and terrify elephants. Thus, the application of the ankus was truly unnecessary.

Conceptualizations of *Phachan*, one of the most vital traditions for elephant rearing, were remarkably diverse and nuanced. However, what was important was that such a controversy did actually bring up not only the question of elephants' welfare but that of elephant conservation as well, owing to the fact that elephants in Thailand have been traditionally associated with various groups of people and their livelihoods. Not surprisingly, the continuing existence of this ritual was excoriated by westernized organizations or countries which held that elephants should be left in the wild without human interference.

Refurbishing Elephant Training: Standardization Set in Motion

Caught in the dilemma between promoting the conservation of Thai elephant and upholding the *Phachan* ritual, NEI eventually adopted a resolution in favor of a momentous change in elephant training. The decision was apparently made to placate dissatisfaction from westernized organizations, both within and outside the country. Further-

5) Interview with Sangduen Lek Chailert at the ENP, Chiang Mai on December 7, 2005.

6) Interview with Sangduen Lek Chailert at the ENP, Chiang Mai on March 6, 2007.

7) Interview with Roger Lohanan at the TAGA on the August 27, 2007.

more, it was high time that NEI should revamp its roles in balancing the fostered targets of elephant preservation in Thai contexts and utilization of elephants for eco-tourism as a concrete strategy for organizational survival. To relieve the elephant's plight, NEI proposed and conceived improved standardization for elephant training and rearing. This was seemingly favorable for a higher quality of elephant livelihood. However, not only did NEI have to reconcile animal rights groups with elephant-rearing communities but it was also obliged to mollify burgeoning contestations created between locally relevant communities and NEI itself.

In practice, NEI established the Mahout and Thai Elephant Training School on August 12, 2000, the world's and the nation's first institution in training elephants and their keepers. Interestingly, in doing so, NEI took the position that the domesticated elephants were inseparable to human beings. Even though the elephant might be liberated by being brought back to nature, that *nature* had to be prepared by people and it was one of NEI's resolutions to nurture this *semi-natural* environment for them so that the elephants could live together and partake in activities with human beings.⁸⁾ Furthermore, since any mistake could happen during the process of passing knowledge of the *Phachan* ritual on to younger generations among local communities, NEI proclaimed to be a representative for instructing the baby elephants.

Owing to the controversy over the *Phachan* ritual in 2002, however, the status of the School was elevated to be the Mahout and Thai Elephant Training College in 2003. The objective of transforming the school into a college was principally to educate *mahouts* and domesticate elephants as to how to coexist in changing Thai society. Particularly, the training process also included an appropriate method of conducting the *Phachan* ritual as a quality upgrade of elephant raising, not as a form of abuse. According to Preecha Phuankham, a noted veterinarian at NEI, the problems of elephant abuse in the past seemed in part a result of *mahouts* who lacked knowledge and an appropriate understanding about elephant rearing [*Matichon*, January 21, 2004: 23]. In fact, the tradition of the *Phachan* ritual did not require the use of violence to make the elephant hurt but instead required the *mahout's* tenderness and care to understand the natural behavior of the elephant [*ibid.*]. Elephant keepers who finished the training course would be certified by NEI and the elephant would be implanted with a microchip to create a health record and maintain its identity document, widely known as *Tua Rupaphan*. To be noted, the overall process of elephant training was free of charge [*ibid.*].

Propitious as this scheme appeared to be, the elephant and mahout training course was not simply operating as it meant to be at the beginning. That is, it gradually become a vital source of income as a tourist attraction for foreigners, and the chance for local *mahouts* to participate in the program also turned out to be too prohibitive to reach in recent years.

8) Interview with Nippakorn Singhaputtangkul at the TECC on December 2, 2005.

Firstly, it was widely known that it was the elephant that was the indispensable agent in cultural and eco-tourism of Thailand. Because almost all of the participants in the training program were foreign tourists who aspired to be a part of this traditional and adventurous, yet marketable practice, they synchronously utilized the precarious status of this symbolic animal on the grounds of conservation for its survival of both the organization and elephants. According to Chanaat Laohawatthana, the FIO's ex-director, it was NEI's stratagem to devise the project on "elephantine business" for elephant conservation and treatment in a sustainable way so that the revenue would be sufficiently created to meet those objectives [Memorandum of the National Elephant Policy Supervisory Committee's resolution on May 19, 2004: unpublished data]. However, this scheme was put to an end under the charge of Manunsak Tantiwiwat, the new director of the FIO who superseded Chanaat Laohawatthana on August 7, 2007.

Secondly, NEI's acknowledged prominence in training elephants started to be queried. From an interview with a heir of the Chiang Dao Elephant Training Center, the very first elephant camp in northern Thailand, the expenditure in the elephant training process in the last seven years cost a reasonable sum of money: the spending for elephant's fodder, tuition fee and mahout employment was less than 4,000 Baht, 10,000 Baht and 4,000 Baht per month, respectively.⁹⁾ However, due to the reorganization of TECC into NEI, the expenses of the program staggeringly escalated to almost 100,000 Baht per month.¹⁰⁾ As a result, the operation of NEI which should have nationally distributed educational access to local elephant handlers for the sake of the elephant's welfare and conservation was noticeably subject to unforeseen criticism because of its business.

Therefore, in lieu of harmonizing the intrinsically culturally diverse groups, NEI alienated them in practice by formally incorporating ideas of elephant conservation into its actual management of the "elephantine business." Strikingly, organizational transformation was actually made possible by utilizing the concept of elephant conservation in reinvigorating TECC's almost run-down tourism business [Rangsan 2002: 199]. Moreover, it was the Thai elephant conservation approach that generated a benign image for NEI, thereby rendering it capable of enjoying a lucrative business in tourism [*ibid.*].

NEI's Elephant Conservation in Progress

While still embroiled in ideological and pragmatic struggles related to elephant conservation, NEI gradually created and developed projects to locate its position in shaping the prospect of elephant conservation in Thailand. This endeavor coalesced with the Master

9) Interview with Sumaethat Yawirat in Chiang Mai on August 20, 2007.

10) Interview with Sumaethat Yawirat in Chiang Mai on August 20, 2007.

Plan for National Elephant Conservation which was inaugurated in 2004 and scheduled to last until 2012. The objective of this Master Plan was to preserve both wild and domesticated elephants in such ways as to enable them to live in harmony with forests and people, and sustain their livelihood with dignity as the national symbolic animal, respectively. This initiative was also boosted by Queen Sirikit's directive to improve the denigrated status of the elephants in the same year [Wildlife Conservation Office 2007: 48]. As the Co-ordination Sub-Committee of the National Elephant Policy Supervisory Committee from May 13, 2004, TECC was obliged to promote cooperation among relevant public and private organizations, as well as local communities so that the management of elephants would be in accordance with the National Elephant Policy Supervisory Committee [*ibid.*: 50].

As can be observed, the projects fostered and implemented by NEI were meant to fulfill four concrete objectives; enhancing the elephants' health and welfare; increase or at least stem the decline in the elephant population; embody the practical utilization of the elephants; and finance the organization itself through eco-tourism programs.

Firstly, as previously mentioned, there existed various projects that emphasized boosting the health and welfare of the elephants. It should be reemphasized that the projects Elephant Reintroduction and Creating the New World for Thai Elephants paved the way for domesticated elephants to be released back to forests as a form of elephant management. Responsive as these projects seemed to the westernized concept of "pristine nature" which means human non-interference in a certain kind of "nature" [Pinkaew 2000: 88], they were said in practice to be conditionally enabled by providing a "semi-nature-like" environment for elephants. At the same time, the Mahout and Thai Elephant Training College conveyed NEI's messages that the culture and tradition of elephants and people in the country was not being disregarded. Rather, it was strategically adapted and purposely factored into the training course provided for both the elephants and their keepers.

Secondly, NEI also endeavored to advance scientific research in projects concerning elephant reproduction and fertility as a way to serve the ideology and moral of elephant conservation. For instance, Artificial Insemination (AI) strikingly revealed the concrete success of elephants inseminated with fresh sperm. Phang Khot, the first female elephant to undergo AI in Thailand, triumphantly gave birth to a male baby elephant on March 7, 2007 through the efforts of unremitting experiments by researchers who started to conduct AI with her in 2005. Moreover, NEI's Elephant Hospital, in collaboration with alliances, successfully innovated an unprecedented method of AI by utilizing the frozen sperm of Sidor Tadaeng, a robust bull elephant held at NEI, with Phang Sao, the cow elephant of the Maesa Elephant Camp between November 27–29, 2005. A baby elephant was eventually born on May 15, 2009. To be noted, TECC set up Thailand's first sperm bank in 2002, thereby making the country renowned for the coveted Guinness world record for "longest-preserved elephant sperm" [Benjamin 2009: 30].

Thirdly, NEI attempted to embody the practical values of the elephants not merely from their symbolic existence but also through innovatory activity. Aware of the inborn values of elephants, NEI pragmatically created an elephant assisted therapy program in which some of the organization's elephants were utilized to treat autistic children and patients since elephants were known to be intelligent, empathetic and communicative. Notably, it was claimed that the elephants could transcend the communication barrier and thus soothe these special children not by treating them as patients but as normal (healthy) persons.¹¹⁾ The success of the "FIO's Elephants Healing Autistic Children Project" revealed that 4 young participants showed satisfactory progress in communication and adaptation with other people after communicatively interacting with elephants for 12 times within 2 years [*Matichon*, August 25, 2007]. Another trailblazing project concerning the elephant's sound waves, infrasound and ultrasound, was also underway to investigate as to how these sound waves would affect the healing of people suffering from phobias, anxiety and depression [*ibid.*].

Fourthly, NEI was still obliged to sustain itself, and found an effective solution to the challenge of financial upkeep in eco-tourism. Practically, several kinds of NEI's programs, including homestays, elephant riding, and elephant shows, could attract tourists, foreigners in particular, to savour an exotic experience with the elephant. The homestay program, for instance, enabled participants to live the ways in which an ordinary *mahout* did in his daily life with an elephant in the forest before the logging ban in 1989. Noticeably, however, the actual package was undeniably economy-oriented since it was to a large extent more strategically formulated to generate the flow of income than it was to meticulously adhere to the past and frozen livelihood of mahouts and elephants.

Thailand's Elephant Conservation in Retrospection

The development from TECC to NEI reveals the transformations undergone by the ideology and practices of elephant conservation in Thailand. Significantly, the founding ideology of TECC was the original platform from which that of NEI was later altered and adjusted to respond to changing circumstances from not merely elephant-rearing communities in the country but also in international communities. That is, TECC's prime objective of saving the Thai elephant from extinction fundamentally paved the way for NEI's main goal, which enlarged its cooperation with other locally elephant-relevant communities to meet an internationally accepted standard. In addition, the activities of elephant conservation of both state agencies were by and large similar though NEI more apparently and actively employed the concept of elephant as Thailand's symbolic animal to run their activities for elephant conservation.

11) Interview with Prasop Thipprasert at the TECC on February 24, 2007.

However, the similarities in TECC and NEI's ideology and activities belie the differences brought about by the changing contexts of these state-backed conservationists' establishment and operation. TECC originated from an ad-hoc necessity to cope with the influx of unemployed elephants in 1989 as well as their endangered existence. Also, its development principally evolved from FIO's endeavor to sustain organizational survival under the banner of elephant conservation. On the contrary, it was NEI's perceived attempt to legitimize TECC's functions by coalescing the voices and interests from the elephant-relevant communities both inside and outside the country with its aggrandizing, yet domineering roles in preserving elephants as the symbolic animal of Thailand.

Concluding Remarks

As state-based elephant conservationists, both TECC and NEI found themselves confronting the dilemma of elephant conservation. Since TECC jumped on the bandwagon of elephant conservation propelled by its financial crisis, its activities were more practically economic-oriented than ideally responsive to its original ideology. Also, NEI which later on came into existence probably misconceived its expected role as the linchpin for Thailand's elephant conservation.

Although the roles and functions of TECC and NEI are indispensable in realizing elephant conservation, there exist certain perspectives that should be taken into consideration. First of all, TECC and NEI are required to be more considerate to the opinions and perspectives of elephant-rearing communities in making concrete decisions, particularly through legal processes, since it unavoidably affects their proper livelihood. The case of NEI proposing the Protection and Conservation of Elephants as the National Symbolic Animal Act is revealing in this respect. Rather than attempting to nationalize all the domesticated elephants whose 95% of the ownership belongs to private or business groups, NEI can potentially conserve the elephant, symbolic animal of the nation, by enhancing a participatory process in which the relevant groups can extensively partake to share their stakes, voice their views and give their consent in seeking a common and cooperative resolution. In addition, as can be noticed from the controversy over the *Phachan* ritual, the tradition of domesticating elephants in the country unveiled the vicissitudes that reflect multiple, at times intertwined, shades of culture and livelihood among the elephant-rearing communities. Mandated by the government, NEI seemed to be agile in standardizing an elephant training method as a counter-measure to westernized criticism. Despite that, it is essential that the organization discretely delineates its pragmatic revamp in a way where genuine ideology and practices are not overshadowed by its "elephantine business."

Moreover, NEI has endeavored to locate its position in elephant conservation of Thailand by vouching for a *semi-natural* environment in which the survival of both the

elephant and people depends on their mutual existence. Since this tenet unfailingly reveals the country's history of elephant use which is intrinsically informed by diverse local knowledge and cultures, NEI has confronted a momentous challenge to coalesce the national standpoint with varying impetus both from internal and external societies. Furthermore, the official conservation of elephants in the country after the logging ban could not have been possible unless it was gradually institutionalized and supervised by TECC and then NEI, the formal organization dealing with the health, welfare and conservation of elephants. On the contrary, NEI might lack legitimacy to exist if it fails to learn and adjust its responsibility in maintaining the elephants in ways that are acceptable to westernized societies while being locally attached to long-preserved traditions. Last but not least, the lessons learnt from the transformation of TECC to NEI disclose another piece of the jigsaw in elephant conservation in Thailand. State agency itself has inadequately strived to pay heed to the elephant since the beginning. It is the intricate and enormous distress faced by the elephant and associated groups of people that continually made NEI realize its ideology, and ambiguous practices of how problems should be tackled. To gather the remaining pieces of the jigsaw, therefore, NEI can look back over the path of elephant conservation that it has created, solidify its pragmatic practices and adapt its initiatives to strike a collective balance with those of other different elephant-raising communities in the country.

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References

Sources in English

Benjamin, Oliver. 2009. Big Ideas at the Thai Elephant Conservation Center. *Guidelines*, March.

- Bourke-Borrowes, D. R. S. 1927. *The Teak Industry of Siam*. Bangkok: The Ministry of Commerce and Communications.
- Thailand, Forest Industry Organization. 2002. *The National Elephant Institute Forest Industry Organization: A New Hope for Elephant Conservation*. Bangkok: Forest Industry Organization.
- Komatra Chuengsatiansup. 1998. Living on the Edge: Marginality and Contestation in the Kui Communities. PhD. Dissertation, Harvard University.
- Mattana Srikrachang. 2003. Conservation and Management of Elephants in Thailand. PhD. Dissertation, Mahidol University.
- Newnham, T. O. 1956. *Teak Logging in Thailand*. Auckland: Graphic Educational Publications Limited.
- Pinkaew Laungaramsri. 2000. Redefining Nature: Karen Ecological Knowledge and the Challenger to the Modern Conservation Paradigm. PhD. dissertation, University of Washington.
- Ringis, Rita. 1996. *Elephants of Thailand in Myth, Art and Reality*. Kuala Lumpur: Oxford University Press.
- Seidenfaden, Erik. 1952. The Kui People of Cambodia and Siam. *Journal of the Siam Society* 39(2): 144–180.
- Sukumar, R. 1992. *The Asian Elephant: Ecology and Management*. Cambridge: Cambridge University Press.

Websites

- Anuphap Nunsong. 2007. *Botbat Khong Or Or Por Nai Kan Chatkan Pa Nai Patchuban* [FIO's Role in Managing Forests Nowadays], April 4, 2007. Accessed June 6, 2010. <http://www.thaingo.org/writer/view.php?id=354>
- Hile, Jennifer. 2002. Activists Denounce Thailand's Elephant "Crushing" Ritual. *National Geographic Today*, October 16, 2002. Accessed February 25, 2009. http://news.nationalgeographic.com/news/2002/10/1016_021016_phajaan.html
- Matichon. 2007. *Thai Tham Samret Chai Chang Bambat Dek Ortistic Phatthanakan Di Khuen* [Thailand Made It: The Use of Elephants in Healing Autistic Children Proved Progressive], August 25, 2007. Accessed April 3, 2009. <http://news.mjob.in.th/social/cat2/news10244/>
- Senate's Sub-committee on Natural Resources and Environment. 2004. *The Study on Conflict Solutions for the Domesticated Elephants and the Wild Elephants in Thailand*. Accessed January 25, 2009. <http://www.senate.go.th/web-senate/research46/pdf/i97.pdf>

Sources in Thai

- Amnuay Corvanich. 1986. *Kan Thammai* [Logging]. 4th ed. Bangkok: Forestry Publication Fund (Kasetsart University).
- Creating the New World for Thai Elephants of Lampang Province Project. n. d.
- Thailand, Forest Industry Organization. 1975. *Raingan Pracham Pi Or Or Por Sor 2516–2517* [Forest Industry Organization Annual Report 1973–1974]. Bangkok: Chumnum Sahakon Kan Kaset Haeng Prathet Thai.
- . 2005. *Ongkan Utsahakam Pamai Liaolang Laena* [Forest Industry Organization's Reflection on its Past and Future]. Bangkok: Forest Industry Organization.
- Memorandum of the National Elephant Policy Supervisory Committee's resolution on May 19, 2004: unpublished data.
- Rangsarn Rattanani. 2002. *Wathakam Bon Lang Chang: Krabuanthat Lae Khrueakhai Rabop Nayobai Nai Kan Borihan Chatkan Changliang Khong Chat Suksa Phan Korani Sathaban Khotshaban Haeng Chat* [Thai Elephant Management and Discourse]. Master Degree, Chulalongkorn University.
- Sakol Chaisomkhom; and Taweepoke Angkawanith, eds. 2002. *Krongkan Kuen Chang Su Thammachat* [Elephant Reintroduction Project]. Bangkok: Siam Thong Kit.
- Thailand, Department of Livestock Development. 1969. *Pramuan Sathiti Pracham Pi Por Sor 2515* [Yearly Statistics Report 1969]. Bangkok: Department of Livestock Development.

- . 1979. *Pramuan Sathiti Pracham Pi Por Sor 2522* [Yearly Statistics Report 1979]. Bangkok: Department of Livestock Development.
- . 1995. *Pramuan Sathiti Pracham Pi Por Sor 2538* [Yearly Statistics Report 1995]. Bangkok: Department of Livestock Development.
- . 1996. *Pramuan Sathiti Pracham Pi Por Sor 2539* [Yearly Statistics Report 1996]. Bangkok: Department of Livestock Development.
- . 2005. *Pramuan Sathiti Pracham Pi Por Sor 2548* [Yearly Statistics Report 2005]. Bangkok: Department of Livestock Development.
- Thailand, Wildlife Conservation Office. 2007. *Phaenmaebot Kan Anurak Chang Haengchat* [The Master Plan for National Elephant Conservation]. Bangkok: Department of National Parks, Wildlife and Plant Conservation.

Interviews

- Lair, Richard C. 2007. Interview by Suphawatt Laohachai boon. March 5. Thai Elephant Conservation Center, Lampang.
- Nippakorn Singhaputtangkul. 2005. Interview by Suphawatt Laohachai boon. December 2. Thai Elephant Conservation Center, Lampang.
- Prasop Thipprasert. 2007. Interview by Suphawatt Laohachai boon. February 24. Thai Elephant Conservation Center, Lampang.
- Lohanan, Roger. 2007. Interview by Suphawatt Laohachai boon. August 27. Thai Animal Guardians Association's office, Bangkok.
- Sangduen Lek Chailert. 2005. Interview by Suphawatt Laohachai boon. December 7. Elephant Nature Park, Chiang Mai.
- . 2007. Interview by Suphawatt Laohachai boon. March 6. Elephant Nature Park, Chiang Mai.
- Soraida Salwala. 2007. Interview by Suphawatt Laohachai boon. August 23. The Elephant Hospital of the Friends of the Asian Elephant, Lampang.
- Sumaethat Yawirat. 2007. Interview by Suphawatt Laohachai boon. August 20. Chiangdao Elephant Training Center, Chiang Mai.

Newspapers

- Banmuang* (Daily)
- Matichon* (Daily)